

AMENDMENTS TO CLAIMS

1. (Currently amended) A probe arrangement for the electrothermal coagulation of tissue comprising a distal probe tip and a proximal hand portion, comprising

at least a first and a second electrode in the region of the distal probe tip, said electrodes being disposed on the exterior of the probe ~~such that in use the electrodes can be brought into electrical contact with tissue simultaneously;~~

an inner conductor which extends from the distal probe tip to the proximal hand portion and is adapted to electrically contact the first electrode in the distal probe tip;

an outer conductor which extends from the distal probe tip to the proximal hand portion and is adapted to electrically contact the second electrode in the distal probe tip, wherein the inner and outer conductors are electrically insulated from each other; and

means for bracing the inner conductor in relation to the outer conductor in such a way that the inner conductor is under tensile stress and the outer conductor is under compression stress, said bracing means including a threaded portion on said inner conductor and a nut engaging said threaded portion and ~~abutting~~ bracing against a portion of said hand portion;

characterized in that ~~the inner conductor is designed to increase the flexural stiffness of the probe arrangement~~ is provided due to the inner conductor being under tensile stress between the probe tip and the hand portion and further characterized in that the inner conductor has a hollow duct which is adapted to pass cooling or heating fluid from the proximal end to the distal end, and a through bore which is adapted to allow the heating or cooling fluid supplied through the hollow duct to be discharged from the hollow duct, and provided between the insulator and the outer conductor is an intermediate space which is adapted to pass the cooling or heating fluid of the hollow duct, which is flowing out of the through bore, back to the proximal end.

2. (Previously presented) A probe arrangement as set forth in claim 1 further comprising a force-locking and/or positively-locking connection that connects the inner conductor to the hand portion and also to the probe tip.

3. (Previously presented) A probe arrangement as set forth in claim 2 characterized in that the inner conductor is connected by a screw connection both to the hand portion and also to the probe tip.

4. (Cancelled)

5. (Previously presented) A probe arrangement as set forth in claim 1 characterized in that the inner conductor is in the form of a metal tube.

6. (Previously presented) A probe arrangement as set forth in claim 1 characterized in that the distal end of the inner conductor is screwed to the probe tip and the proximal end of the inner conductor is braced in relation to the hand portion.

7. (Previously presented) A probe arrangement as set forth in claim 1 characterized by an insulator which is arranged between the inner and outer conductors and adapted to electrically insulate the inner conductor from the outer conductor .

8. (Previously presented) A probe arrangement as set forth in claim 5 characterized in that the inner and outer conductors and the insulator are arranged coaxially relative to each other.

9. (Cancelled)

10. (Previously presented) A probe arrangement as set forth in claim 1 characterized in that the first electrode is in the form of a tip electrode .

11. (Previously presented) A probe arrangement as set forth in claim 1 characterized in that the second electrode is in the form of a shaft electrode .

12. (Previously presented) A probe arrangement as set forth in claim 1 characterized in that arranged between the tip electrode and the shaft electrode is an insulator element which is adapted to insulate the tip electrode from the shaft electrode

13. (Previously presented) A probe arrangement as set forth in claim 10 characterized in that the insulator element is of an annular configuration.

14. (Previously presented) A probe arrangement as set forth in claim 1 characterized by an insulation tube which insulates the outer conductor outwardly.

15. (Previously presented) A probe arrangement as set forth in claim 14 further comprising an insulator that insulates said outer conductor from said inner conductor and wherein the hand portion has a first hand portion element which is adapted to receive the proximal ends of the inner conductor, the outer conductor, the insulator and the insulation tube.

16. (Previously presented) A probe arrangement as set forth in claim 15 characterized in that the first hand portion element has a first blind bore and a longitudinal slot between the proximal end of the first hand portion element and the first blind bore, which is adapted to pass an electrically conductive spring wire from the proximal end of the first hand portion element to the outer conductor in the first blind bore in order to electrically contact the outer conductor .

17. (Previously presented) A probe arrangement as set forth in claim 14 characterized in that the first hand portion element has a transverse bore and a second blind bore which cross each other and are adapted to provide a communication between the proximal end of the hand portion element and.

18. (Previously presented) A probe arrangement as set forth in one of claims 4 through 15 characterized in that at its proximal end the inner conductor has a male screwthread which is adapted to brace the inner conductor with a screwthreaded nut in relation to the first hand portion element.

19. (Previously presented) A probe arrangement as set forth in ~~one of~~ claim 9 characterized by an electrically little- conducting or non-conducting cooling fluid, preferably deionized water, wherein said fluid is circulated toward the distal end

of said probe through said hollow duct and then away ~~away~~ from said distal end via said intermediate space.